

CLAIMS

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- 1 - Device to produce panels of mosaic tesserae (13), used to apply at least a supporting and/or lining sheet (12) on a visible face of said tesserae (13) arranged inside an advancing frame (14), said device comprising feeding means (16) and application means for applying said sheet (12) cooperating with the feeding means of said frame (14), characterized in that said application means comprise cutting means (20) able to cut to size a segment (12a) of said sheet (12) and suction drum rotating means (18) able to retain at least temporarily, on their outer cylindrical surface, said segment (12a) of sheet (12) and to release it onto said mosaic tesserae (13).
- 2 - Device as in claim 1, characterized in that said cutting means (20) are able to act on said sheet (12) when it is held on the outer surface of said suction drum means (18).
- 3 - Device as in claim 1 or 2, wherein said sheet (12) has a face equipped with gluing means, characterized in that said sheet (12) is able to wind on said suction drum means (18) with its face without gluing means and for an angle such as to invert the direction of feed and present its face equipped with gluing means facing towards said frame (14).
- 4 - Device as in any claim hereinbefore, characterized in that it comprises at least a pressure roller (21) arranged downstream of said suction drum means (18), said pressure roller (21) being able to press the segment (12a) of said sheet (12) against the surface of said tesserae (13) to achieve the stable attachment thereof.
- 5 - Device as in claim 1, characterized in that said suction drum means (18) comprise a hollow drum equipped inside with means able to create a depression and with a plurality of holes (19) on its cylindrical outer surface.
- 6 - Device as in claim 5, characterized in that said suction

drum means (18) comprise means able to interrupt the suction at least in the step when the segment (12a) of said sheet (12) is released in correspondence with a relative frame (14) containing said tesserae (13).

5 7 - Device as in claim 6, characterized in that said means able to interrupt the suction comprise mechanical means arranged inside said hollow drum (18) for a zone correlated substantially to the size of said frame (14).

10 8 - Device as in claim 3, characterized in that it comprises means (22) to deliver steam or nebulized water arranged in cooperation with the visible face of said mosaic tesserae (13) and able to deliver a jet against said face to re-activate the glue on said sheet (12).

15 9 - Device as in any claim hereinbefore, characterized in that said suction drum means (18) are equipped with an alternate lifting/lowering movement to allow the free transit of the frame (14) after the segment of sheet (12) has been released.

20 10 - Device as in any claim hereinbefore, characterized in that it is able to apply said supporting and/or lining sheet (12) on the visible face of said tesserae (13).

25 11 - Device as in any claim from 3 to 10 inclusive, characterized in that, in the event that said sheet (12) to be applied comprises at least two layers (112 and 212), of which a first layer (112) is able to be arranged on said mosaic tesserae (13) and at least a second layer (212) is able to hold the glue and to be removed when said first layer (112) comes into contact with said suction drum (18), a winding roller (23) is arranged substantially parallel to
30 said suction drum (18) to rewind said second layer (212) after it has been detached from said first layer (112).

12 - Device as in any claim hereinbefore, characterized in that it comprises means (24) able to heat the visible face

of said tesserae (13) arranged upstream of said means to apply said sheet (12).

13 - Device as in claim 12, characterized in that said means able to heat the visible face of said tesserae (13) comprise
5 at least a bar (24) delivering a flow of hot air.

14 - Device as in claim 12, characterized in that said means able to heat the visible face of said tesserae (13) comprise at least a radiating heating device.

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16 - Method to produce panels of mosaic tesserae (13) and in particular to apply at least a supporting and/or lining sheet (12) on a visible face of the mosaic tesserae (13) arranged inside an advancing frame (14), the method using feeding means (16) and application means for applying said sheet (12) cooperating with the feeding means of said frame (14), characterized in that it provides that cutting means (20) cut to size a segment (12a) of the sheet (12) and that suction drum rotating means (18) retain at least temporarily, on their outer cylindrical surface, said segment (12a) of sheet (12) and release it onto said frame (14) containing said mosaic tesserae (13).

16 - Method as in claim 15, wherein said sheet (12) has a face equipped with gluing means, characterized in that it provides that said sheet (12) winds on said suction drum means (18) with its face without gluing means and for an
25 angle such as to invert the direction of feed and to present its face equipped with gluing means facing towards said frame (14).

17 - Method as in claim 15 or 16, characterized in that it provides that at least a pressure roller (21), arranged
30 downstream of said suction drum means (18), presses the segment of sheet (12) against the surface of said tesserae (13) to achieve the stable attachment thereof.

18 - Method as in any claim from 15 to 17 inclusive,

characterized in that it provides to interrupt the suction of said suction drum means (18) at least in the step when the segment of sheet (12) is released in correspondence with a relative frame (14) containing said tesserae (13).

5 19 - Method as in any claim from 15 to 18 inclusive, characterized in that means (22) to deliver steam or nebulized water, arranged in cooperation with the visible face of said mosaic tesserae (13), deliver a jet against said visible face to re-activate the glue arranged on said sheet (12).

10 20 - Method as in any claim from 15 to 19 inclusive, characterized in that it provides to move said suction drum means (18) alternately up and down to allow the free transit of the frame (14) after the segment (12a) of sheet (12) has been released.

15 21 - Method as in any claim from 15 to 20 inclusive, characterized in that it provides to apply said supporting and/or lining sheet (12) onto the visible face of said tesserae (13).

20 22 - Method as in any claim from 15 to 21 inclusive, characterized in that heating means (24) deliver a heating flow onto the visible surface of said tesserae (13) before the sheet (12) is applied thereon.

25 23 - Method as in claim 22, characterized in that said heating flow has a temperature of between about 20 and about 40 °C.

30 24 - Panels of glass mosaic, comprising a plurality of mosaic tesserae (13) arranged in a desired geometric configuration, characterized in that they comprise a transparent supporting sheet (12) arranged on the visible face of said mosaic tesserae (13).

25 - Panels as in claim 24, characterized in that said supporting sheet (12) has at least a face equipped with

